

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE APPLICATION OF THE JESSAMINE COUNTY)
WATER DISTRICT NO. 1, A WATER DISTRICT PUR-)
SUANT TO CHAPTER 74 OF THE KENTUCKY REVISED)
STATUTES, IN JESSAMINE COUNTY, KENTUCKY FOR)
(1) A CERTIFICATE OF PUBLIC CONVENIENCE AND)
NECESSITY, AUTHORIZING AND PERMITTING SAID)
WATER DISTRICT TO CONSTRUCT WATERWORKS)
DISTRIBUTION SYSTEM IMPROVEMENTS, CONSISTING)
OF AN ELEVATED WATER STORAGE TANK, WITH) CASE NO.
PUMPING STATION AND APPURTENANCES AND AP-) 9567
PROXIMATELY 3,000 FEET OF WATER TRANSMISSION)
LINES; (2) APPROVAL OF THE PROPOSED PLAN OF)
FINANCING OF SAID PROJECT; AND (3) APPROVAL)
OF INCREASED WATER RATES PROPOSED TO BE)
CHARGED BY THE DISTRICT TO ITS CUSTOMERS)

O R D E R

On April 24, 1986, Jessamine County Water District No. 1 ("Jessamine" or "District") filed its Application and Motion to reopen Case No. 9277, seeking authorization to construct a \$503,000 waterworks improvement project, approval of its financing for the proposed project and approval of an increase in its water service rates.

The project financing includes a \$330,000 loan from the Farmers Home Administration ("FmHA"), a \$63,000 supplemental loan from FmHA, \$60,000 from district funds, and \$50,000 from a local developer. The FmHA loans will be secured by waterworks revenue bonds maturing over a 40-year period at interest rates of 9 1/8 percent per annum and 7 1/8 percent per annum, respectively.

The project will add a water storage tank and related facilities to Jessamine's system. Plans and specifications by Parrott, Ely and Hurt, Engineers, of Lexington, Kentucky, ("Engineer") have been approved by the Division of Water of the Natural Resources and Environmental Protection Cabinet.

A hearing was held on May 28, 1986. There were no intervenors present and no protests were entered.

Jessamine requested rates to produce an annual increase of \$83,885. The Commission herein approves rates calculated to produce an increase of \$56,300 per annum after normalization of an increase during the test period.

COMMENTARY

In 1981 the FmHA and the Public Service Commission executed a "Memorandum of Agreement" pertaining to FmHA funded construction projects. This "Memorandum of Agreement", revised in 1984, outlines a reasonable time schedule for the accomplishment of all necessary steps to satisfy the concerns of both the FmHA and the Public Service Commission.

Unfortunately in this case, Jessamine has not enabled us to comply with the FmHA/PSC agreement. An Order could not be entered by the Commission in Jessamine's original filing in this matter, since the 10-month statutory time frame for the Commission to decide rate cases expired before receipt of bids for the proposed construction. In addition, Jessamine's motion to reconsider this case was not timely filed. Construction bids had been received about 3 months prior to refiled and were due to expire June 6, 1986, prior to the 45-day extension.

CONTINUITY OF ADEQUATE AND RELIABLE SERVICE

Jessamine's Engineer has provided information indicating that reliable and adequate service can be maintained throughout the expanded system after completion of the proposed construction. The Commission is concerned, however, that the pressure provided by Jessamine to approximately 75 customers in the lower elevations of its service area may exceed 150 psig. Pressures above this level are in violation of Commission regulation 807 KAR 5:066, Section 6 (1).

The Commission is also concerned that at certain times the pressure on the suction side of the proposed booster pumping station could fall below 30 psig during pump operation. Jessamine should monitor this condition after construction. If this monitoring indicates that the level of service at this point is inadequate or declining, Jessamine should take the necessary actions to maintain the level of service in conformance with the regulations of the Commission.

The Commission reminds Jessamine of its obligation to provide adequate pressure to all of its customers in compliance with Commission regulations. Jessamine should take the necessary steps to insure that no customer's pressure exceeds 150 psig.

TEST PERIOD

Jessamine proposed and the Commission has accepted the 12-month period ending December 31, 1985, as the test period in this matter.

REVENUES AND EXPENSES

Jessamine reported a net loss of \$2,689 for the test period. The District proposed several pro forma adjustments to its test period operating revenues and expenses more accurately reflecting current operating conditions. The Commission finds these adjustments reasonable and has accepted them for rate-making purposes with the following exceptions:

Operating Revenues

Jessamine showed test period operating revenues of \$94,111 from the sale of water to its 409 customers. The billing analysis was adjusted by the Commission staff for mathematical errors and to reflect individual usage of six multi-unit customers that had been billed as a unit during the test period. Using water usage figures furnished by Jessamine, the Commission staff further revised the billing analysis, causing an adjustment of \$13,813, resulting in normalized test year revenues of \$107,924.

Purchased Water

Jessamine incurred purchased water expense in the amount of \$51,431 for the test period, to which it made a pro forma adjustment of \$3,714, for an adjusted water cost of \$55,145. The criterion for the adjustment was an estimate of future sales. The Commission is of the opinion that since the billing analysis represents average water sales for the test period, an adjustment to this level is inappropriate without a similar adjustment to water sales. Therefore, the Commission has reduced purchased water cost by \$3,714.

Inflation Adjustment

It is the practice of the Commission to allow only known and measurable increases to actual test period expenses which can be substantiated by appropriate documentation such as invoices and/or other related material which support proposed adjustments. The notes to Jessamine's comparative income statement indicate that the following accounts and adjustments were calculated by use of an "inflation adjustment" of approximately 3.5 percent. The proposed construction project will not cause any change in the level of operations other than those specifically identified in other sections of this Order. Therefore, the Commission has deleted the following pro forma adjustments totalling \$2,334:

Maintenance of Meters	\$ 762
Meter Reading Labor	\$ 192
Office Supplies and Other Expense	\$ 244
Property Insurance	\$ 120
EPA Monitoring	\$1,016

Outside Services Employed

Item number 7 of the notes to the comparative income statement indicates average annual engineering consultation fees of \$1,659 to which a pro forma adjustment of \$2,000 has been added to provide engineering services related to the future relocation of water lines as a result of road construction and upgrading of water lines. The Commission is of the opinion that any expenses incurred for this purpose should be capitalized at the conclusion of such construction, and has therefore deleted \$2,000 from the test year pro forma operating expenses.

Depreciation Expense

Jessamine had recorded depreciation expense in the amount of \$7,451 for the test period. On the comparative income statement filed on May 23, 1986, it showed a pro forma adjustment of \$9,374, for adjusted depreciation expense of \$16,825. After the hearing, Jessamine submitted an analysis of depreciation expense on June 2, 1986, indicating depreciation expense on the existing plant of \$8,238 and pro forma depreciation expense on the proposed construction of \$12,575, totalling \$20,813. It has been the practice of the Commission in previous decisions to compute depreciation expense for rate-making purposes on the basis of original cost of the plant in service less contributions in aid of construction, as a utility should not be allowed recovery of that portion of the plant which has been provided free of cost.

In determining the allowable depreciation expense the Commission has used a rate of 2.5 percent in its calculations, which is the same percentage used by Jessamine. Thus, the Commission finds that the appropriate adjusted test period depreciation expense is \$17,042.¹

¹ Computation of depreciation expense:

Water utility plant in service:		
Existing plant, December 31, 1985	\$329,552	
Proposed new construction	<u>503,000</u>	\$832,552
Less: Contributions in aid of construction-		
Existing plant, December 31, 1985	\$100,841	
Proposed new construction	<u>50,000</u>	150,841
Non-contributed plant in service		
Composite rate (Jessamine No. 1 Sch. No. 3- \$20,813 + \$832,552 = 2.5%)	x 2.5%	<u>\$ 17,042</u>
Allowable depreciation expense		

Therefore, Jessamine's adjusted operations at the end of the test period are as follows:

	<u>Jessamine No. 1 Adjusted</u>	<u>Commission Adjustments</u>	<u>Commission Adjusted</u>
Operating Revenues	\$ 96,540	\$13,813	\$110,353
Operating Expenses	123,289	(7,831)	115,458
Net Operating Income	<u><u>\$(26,749)</u></u>	<u><u>\$21,644</u></u>	<u><u>\$ (5,105)</u></u>
Other Income	975		975
Debt Service Requirement	43,912	(437)	43,475
Other Interest Expense	27		27
Net Income	<u><u>\$(69,713)</u></u>	<u><u>\$22,081</u></u>	<u><u>\$(47,632)</u></u>

REVENUE REQUIREMENT

Jessamine's annual debt service based on debt outstanding during the test period and debt proposed in this proceeding is \$43,475.² Jessamine's adjusted net operating loss of \$5,105 plus adjusted interest income of \$975 provides a negative debt service coverage ("DSC") of 0.095X. The Commission is of the opinion that this coverage is unfair, unjust and unreasonable. To achieve a DSC of 1.2X, which the Commission is of the opinion is the fair, just and reasonable coverage necessary for Jessamine to pay its operating expenses and to meet the requirements of its lenders, Jessamine would require a net operating income of \$51,195. Accordingly, the Commission has determined that additional revenue

² Computation of average debt service:

of \$56,300 is necessary to provide the 1.2X DSC which will ensure the financial stability of Jessamine.

Billing Analysis

Jessamine serves six multi-unit customers through master meters who were billed as single customers during the test year. However, effective January 1, 1986, the billing procedure for these customers was changed to a per unit basis, which was not taken into account in calculating its proposed rates and revenue.

Subsequent to the hearing, Jessamine provided its initial work papers and a schedule showing the monthly usage for each of the multi-unit customers. Based on this additional information, the Commission has adjusted the billing analysis to reflect the change in billing procedure, resulting in normalized test year water sales revenue of \$107,924.

Rate Design

Jessamine bills its customers on a declining block rate schedule with three usage levels. The rates proposed by Jessamine would result in increases of 33 percent, 114 percent and 108 percent for the respective usage levels. No evidence was presented as to the methodology used in arriving at the proposed rates or to justify the wide variation in increases per rate level.

It is the practice of the Commission to promote gradualism and to require justification for material changes in rate design. Further, the proposed rates were based on a billing analysis which did not consider the effect of the changed procedure for multi-unit customer billing. Therefore, the Commission is of the opinion that the increase granted herein should be more evenly

distributed and that the rates in Appendix A will accomplish a more equitable distribution of the increase than those proposed by the District.

FINDINGS AND ORDERS

The Commission, after consideration of the application and evidence of record and being advised, is of the opinion and finds that:

1. According to information provided by the Engineer, upon completion of construction, pressure to approximately 75 customers will exceed 150 psig. Pressures above this level are in violation of Commission regulation 807 KAR 5:066, Section 6(1). Jessamine should install pressure reducing facilities to insure that no customer's pressure exceeds 150 psig.
2. With the installation of pressure reducing facilities in accordance with Finding Number 1 herein, public convenience and necessity require that the construction be performed and that a certificate of public convenience and necessity be granted.
3. The proposed project includes about 3000 feet of 10-, and 6-inch water main, a 250,000-gallon water storage tank, a booster pumping station and miscellaneous appurtenances. The low bids received for the proposed construction totaled \$362,959 which will require about \$503,000 in project funding after allowances are made for fees, contingencies, other indirect costs, pressure reducing facilities as outlined in Finding Number 1, additional construction being considered to utilize any remaining contingency funds.

4. Jessamine should obtain approval from the Commission prior to performing any additional construction not expressly certificated by this Order.

5. Any deviations from the construction herein approved which could adversely affect service to any customer should be done only with the prior approval of this Commission.

6. Jessamine should furnish duly verified documentation of the total costs of this project including the cost of construction and all other capitalized costs (engineering, legal, administrative, etc.) within 60 days of the date that construction is substantially completed. Said construction costs should be classified into appropriate plant accounts in accordance with the Uniform System of Accounts for Water Utilities prescribed by this Commission.

7. Jessamine's contract with its Engineer should require the full-time resident inspection under the general supervision of a professional engineer with a Kentucky registration in civil or mechanical engineering to ensure that the construction work is done in accordance with the contract plans and specifications and in conformance with the best practices of the construction trades involved in the project.

8. Jessamine should require the Engineer to furnish a copy of the "as-built" drawings and a signed statement that the construction has been satisfactorily completed in accordance with the contract plans and specifications within 60 days of the date of substantial completion of this construction.

9. The financing plan proposed by Jessamine is for lawful objects within the corporate purposes of its utility operations, is necessary and appropriate for and consistent with the proper performance of services to the public and will not impair its ability to perform these services and should, therefore, be approved.

10. The financing secured by Jessamine for this project will be needed to pay for the work herein approved. Jessamine's financing plan should, therefore, be approved.

11. The rates proposed by Jessamine produce revenues in excess of the revenues found reasonable herein and should be denied upon application of KRS 278.030.

12. The rates and charges in Appendix A are the fair, just and reasonable rates and charges to be charged by Jessamine in that they should produce revenues from water sales of \$164,224 and gross revenues of \$167,628.

IT IS THEREFORE ORDERED that:

1. Jessamine be and it hereby is granted a certificate of public convenience and necessity to proceed with the proposed construction project as set forth in the drawings and specifications of record herein on the condition that pressure reducing facilities be installed in accordance with Finding Number 1 of this Order.

2. Jessamine's plan of financing consisting of a loan from the FmHA in the amount of \$330,000 with an interest rate of 9 1/8 percent and a 40-year term, a supplemental loan from the FmHA in the amount of \$63,000 with an interest rate of 7 1/8 percent and a

40-year term, a grant from a local developer in the amount of \$50,000 and \$60,000 in Jessamine funds be and it hereby is approved.

3. If under new FmHA loan conditions Jessamine is notified and granted the option of accepting a lower interest rate at the date of closing, Jessamine shall file with the Commission the FmHA notification of the lower interest rate and shall provide all correspondence from and to FmHA concerning this notification within 30 days of the closing date.

4. Jessamine shall file a statement of the interest rate accepted from FmHA within 30 days of the date of closing.

5. If Jessamine accepts an interest rate different from the rate approved herein, it shall file amended pages to its bond resolution and an amended amortization schedule.

6. If Jessamine is eligible but does not take advantage of a lower interest rate at the time of closing, it shall fully document why the lower rate was not accepted showing an analysis of the higher costs associated with the loan over its life.

7. Jessamine shall comply with all matters set out in Findings 4 through 8 as if the same were individually so ordered.

8. The rates and charges proposed by Jessamine be and they hereby are denied.

9. The rates and charges in Appendix A be and they hereby are approved for service rendered by Jessamine on and after the date of this Order.

10. Within 30 days from the date of this Order Jessamine shall file with this Commission its revised tariff sheets setting out the rates and charges approved herein.

Nothing contained herein shall be deemed a warranty of the Commonwealth of Kentucky, or any agency thereof, of the financing herein authorized.

Done at Frankfort, Kentucky, this 11th day of July, 1986.

PUBLIC SERVICE COMMISSION

Richard D. Sherman
Chairman

R. D. L.
Vice Chairman

Susan N. Williams
Commissioner

ATTEST:

Secretary

APPENDIX A

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE COMMISSION IN CASE NO. 9567 DATED JULY 11, 1986.

The following rates and charges are prescribed for customers receiving water service from Jessamine County Water District No.

1. All other rates and charges not specifically mentioned herein shall remain the same as those in effect under authority of this Commission prior to the effective date of this Order.

Usage Blocks

First 3,000 gallons
Next 7,000 gallons
Over 10,000 gallons

Monthly Rates

\$12.55 Minimum
2.15 per 1,000 gallons
1.85 per 1,000 gallons

Minimum Bills

<u>Meter Size</u>	<u>Minimum Usage</u>	<u>Minimum Bill</u>
5/8-inch X 3/4-inch	3,000 gallons	\$12.55
1-inch	5,000 gallons	16.85
1 1/2-inch	10,000 gallons	27.60

All usage above the minimum will be billed according to the general rate schedule.